What is claimed is:

1. An optical receiving apparatus, comprising:

a light receiving element which converts an optical input signal into a corresponding electrical signal;

a pre-amplifier having an input which receives the electrical signal from the light receiving element, a non-inverting output which outputs a first amplified signal, and an inverting output which outputs a second amplified signal which is phase inverted relative to the first amplified signal;

a data detection circuit which receives at least one of the first and second amplified signals from the pre-amplifier, and which outputs a data detection signal in response to a change in a logic value of the at least one of the first and second amplified signals;

a reset circuit which receives the data detection signal from the data detection circuit, and which outputs a reset signal in response to a change in a logic value of the data detection signal; and

a threshold control circuit which detects and outputs first and second peak values of the respective first and second amplified signals output from the pre-amplifier, wherein the threshold control circuit is responsive to the reset signal to remove a bias voltage which is present in at least one of the first and second amplified signals.

2. The optical receiving apparatus according to claim 1, wherein the threshold

control circuit comprises:

a first peak hold circuit which outputs a first peak signal corresponding to a peak value of the first amplified signal; and

a second peak hold circuit which outputs a second peak signal corresponding to a peak value of the second amplified signal;

wherein the second peak hold circuit is responsive to the reset signal to remove the bias voltage from the second peak signal.

3. The optical receiving apparatus according to claim 2, wherein the reset signal is a pulse signal having a given period, and wherein the given period of the pulse signal is equal to or more than an amount of time needed by the second peak hold circuit to remove the bias voltage from the second amplified signal.

4. The optical receiving apparatus according to claim 2, wherein the threshold control circuit further comprises:

a first adder which adds the first amplified signal and the second peak signal;

a second adder which adds the second amplified signal and the first peak signal; and

a differential amplifier which differentially amplifies respective outputs from the first and second adders.

5. The optical receiving apparatus according to claim 4, further comprising a

comparator which discriminates an output of the differential amplifier with reference to a predetermined reference level, and outputs an output signal.

6. An optical receiving apparatus, comprising:

a light receiving element which converts an optical input signal into a corresponding electrical signal;

a pre-amplifier having an input which receives the electrical signal from the light receiving element, a non-inverting output which outputs a first amplified signal, and an inverting output which outputs a second amplified signal which is phase inverted relative to the first amplified signal;

a data detection circuit having a fixed voltage supply, a first comparator and a latch circuit, wherein the fixed voltage supply supplies a fixed voltage to the first comparator, and wherein the first comparator compares the first amplified signal with the fixed voltage, and wherein the latch circuit latches an output of the first comparator and outputs a first data detection signal and a second data detection signal which is phase inverted relative to the first data detection signal;

a reset circuit which receives the first and second data detection signals from the data detection circuit, and which outputs a reset signal in response to the data detection circuit, wherein the reset circuit includes a delay circuit which delays one of the first and second data detection signals, and a logic circuit which multiplies the other of the first and second data detection signals with an output of the delay circuit to obtain the reset signal;

a threshold control circuit which detects and outputs first and second peak values of the respective first and second amplified signals output from the pre-amplifier, wherein the threshold control circuit is responsive to the reset signal to remove a bias voltage which is present in at least one of the first and second amplified signals.

7. The optical receiving apparatus according to claim 6, wherein the fixed voltage level is higher than a reference voltage level of the first amplified signal.

8. The optical receiving apparatus according to claim 6, wherein the reset signal is a pulse signal having a given period, and the given period of the pulse signal is equal to an amount of time that the other of the data detection signals and the output of the delay circuit are simultaneously input into the logic circuit.

9. The optical receiving apparatus according to claim 6, wherein the delay circuit delays one of the first and second data detection signals for a given period, and wherein the given period is equal to or more than an amount of time needed by the second peak hold circuit to remove the bias voltage from the second amplified signal.

10. The optical receiving apparatus according to claim 6, wherein the threshold control circuit comprises:

a first peak hold circuit which outputs a first peak signal corresponding to a

peak value of the first amplified signal; and

a second peak hold circuit which outputs a second peak signal corresponding to a peak value of the second amplified signal;

wherein the second peak hold circuit is responsive to the reset signal to remove the bias voltage from the second peak signal.

11. The optical receiving apparatus according to claim 10, wherein the threshold control circuit further comprises:

a first adder which adds the first amplified signal and the second peak signal;

a second adder which adds the second amplified signal and the first peak signal; and

a differential amplifier which differentially amplifies respective outputs from the first and second adders.

12. The optical receiving apparatus according to claim 11, further comprising a second comparator which discriminates an output of the differential amplifier with reference to a predetermined reference level, and outputs an output signal.

13. An optical receiving apparatus, comprising:

a light receiving element which converts an optical input signal into a corresponding electrical signal;

a pre-amplifier having an input which receives the electrical signal from the light

receiving element, a non-inverting output which outputs a first amplified signal, and an inverting output which outputs a second amplified signal which is phase inverted relative to the first amplified signal;

a data detection circuit having a fixed voltage supply, a differentiation circuit, a first comparator and a latch circuit, wherein the fixed voltage supply supplies a fixed voltage to the first comparator, wherein the differentiation circuit differentiates the second amplified signal and outputs a differentiated signal, wherein the first comparator compares the first amplified signal with the fixed voltage, and wherein the latch circuit latches an output of the first comparator and outputs a first detection signal and a second detection signal which is phase inverted relative to the first detection signal;

a reset circuit which receives the first and second data detection signals from the data detection circuit, and which outputs a reset signal in response to the data detection circuit.

a threshold control circuit which detects and outputs first and second peak values of the respective first and second amplified signals output from the pre-amplifier, wherein the threshold control circuit receives the reset signal to remove a bias voltage of which is preset in at least one of the first and second amplified signals.

14. The optical receiving apparatus according to claim 13, wherein the reset circuit further comprises:

a delay circuit which delays one of the first and second detection signals; and

a logic circuit which multiplies the other of the first and second detection signals with an output of the delay circuit.

15. The optical receiving apparatus according to claim 13, wherein an initial voltage level of the differentiated signal is higher than the fixed voltage level.

16. The optical receiving apparatus according to claim 13, wherein the first comparator outputs an output signal while the differentiated signal level is below the fixed voltage level.

17. The optical receiving apparatus according to claim 13, wherein the delay circuit delays one of the first and second data detection signals for a given period, and wherein the given period is equal to or more than an amount of time needed by the second peak hold circuit to remove the bias voltage from the second amplified signal.

18. The optical receiving apparatus according to claim 13, wherein the threshold control circuit comprises:

a first peak hold circuit which outputs a first peak signal corresponding to a peak value of the first amplified signal; and

a second peak hold circuit which outputs a second peak signal corresponding to a peal value of the second amplified signal;

wherein the second peak hold circuit is responsive to the reset signal to remove

the bias voltage from the second peak signal.

19. The optical receiving apparatus according to claim 18, wherein the threshold control circuit further comprises:

a first adder which adds the first amplified signal and the second peak signal;

a second adder which adds the second amplified signal and the first peak signal; and

a differential amplifier which differentially amplifies respective outputs from the first and second adders.

20. The optical receiving apparatus according to claim 19, further comprising a second comparator which discriminates an output of the differential amplifier with reference to a predetermined reference level, and outputs an output signal.